# DESCRIPTIONS OF TWENTY-THREE NEW GENERA AND THIRTY-ONE NEW SPECIES OF ICHNEUMON-FLIES.

# By HENRY L. VIERECK,

Of the Bureau of Entomology, United States Department of Agriculture.

This paper is based chiefly upon South American material in the collection of the United States National Museum and in the Königliche Zoologische Museum, Berlin The specimens from the Berlin museum were collected for the most part by Mr. J. D. Anisits in Paraguay and were submitted to the writer for identification with the assurance that the United States National Museum was to be favored with duplicates of the several species.

In addition to the South American species which were mostly collected at large there are a few reared species that promise to become of economic importance.

### FAMILY BRACONIDÆ.

### ASPIGONUS STRAMINEICOLOR, new species.

Type-locality.—San Bernardino, Paraguay, K. Fiebrig, S. V. 22.

Type.—Königliche Zoologische Museum, Berlin.

Structurally this species is so similar to the genotype of Baeacis that I think its true position may be approximated by comparing it with Aspigonus (Baeacis) abietis Ratzeburg. Aspigonus diversicornis Wesmael the genotype of Aspigonus is unknown to the writer through a specimen. It would seem to the writer that Baeacis must fall as a synonym of Aspigonus if it offers no more differences than those mentioned in the original description of the genus.

Female.—Length, 4.5 mm.; sheaths of the ovipositor apparently as long as the body; tegument uniformly stramineous except for part of the head; face without a shallow fossa between the eyes and the scrobes, antennæ 30-jointed, blackish, scape stramineous beneath, space between the ocelli black, mandibles stramineous at base shading to castaneous then to black at the tips; rugæ of the propodeum arranged so as to represent the poorly defined limits of areolæ; first dorsal segment virtually smooth and polished throughout like the rest of the abdomen; otherwise very similar to the species compared.

### CALOBRACON BICOLOR PÆNEUNICOLOR, new subspecies.

Type-locality.—Asuncion, Paraguay, November and December, 1904, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 14 mm.; agrees with the original description of Colobracon bicolor Szepligeti except in the first abscissa of the cubitus which is not broken at the base, in the yellowish postorbital line, in the blackish tegulæ, reddish mesosternum and almost entirely black or blackish abdomen.

Allotopotype—Somewhat smaller than the type, otherwise essentially as in the type. Two female paratypes are from Villa Morra and were collected November 19 and October 14, 1905, the latter specimen is only 11 mm. long

#### Genus CHELONUS Panzer.

#### TABLE OF SOME SOUTH AMERICAN SPECIES.

- First joint of the flagel hardly shorter than the scape or as long or somewhat longer than the scape.
   3.
   First joint of the flagel distinctly shorter than the scape; carapace with subbasal
- lateral maculæ. bipustulatus Viereck.

  3. Carapace hardly twice as long as wide in the middle. 4.

townsendi Viereck.

#### CHELONUS (CHELONELLA) SZEPLIGETII, new species.

Type-locality.—Pernambuco, Brazil. Type.—Cat. No. 13795, U.S.N.M.

Female.—Length 3 mm.; compared with the original description of Chelonus sobrinus Szepligeti, the male of which alone is described. This differs as follows: Front medially shining, striato-punctate, laterally dullish punctured, notauli represented by reticulations which in addition give character to the prescutum and the posterior half of the scapulæ; carapace reticulate, the reticulation becoming almost lost toward the apex of the segment, the latter with a nearly circular foramen that apparently represents the similarly placed foramen in the male, fore femora pale stramineous to yellowish, mid and hind femora basally and apically pale yellowish, hind tibiæ with a subbasal brownish mark and with the apex brownish to blackish;

antennæ 16-jointed, flagel blackish, first joint of the flagel hardly more than two-thirds the length of the scape.

Allotype.—Essentially as in the type but with the antennæ more than 16-jointed and with the apical foramen of the carapace having its greatest diameter at least twice the length of the shortest diameter.

The above specimens as well as three paratopotypes were collected by Koebele and Branner and bear the following legends, February '83, 1–18–'83 No. 70, and 10/2, '83 collected on cotton. Of the paratopotypes there is one specimen only 2 mm. long. A paratype from San Bernardino, Paraguay, bears the label K. Fiebrig S. V. and S. VI, and belongs to the Königliche Zoologische Museum, Berlin.

#### CYANOPTERUS DIVERSUS, new species.

Type-locality.—Bahia, Brazil, No. 819, March 14, 1883, A. Koebele. Type.—Cat. No. 16215, U.S.N.M.

Female.—Length, 10 mm.; agrees with the original description of *Ipobracon disparatus* Szepligeti except in the mesonotum which is mostly black, in the mesopleuræ being reddish above the furrow and in the longer ovipositor which is approximately 3 mm. long; basal area of the second segment triangular, its sides angulate near the middle.

Paratypes from Asuncion, Paraguay, Cape Laureles, February 4, 1906; Cape Olympo, December 11, 1904; Villa Morra, December 21, 30, 1904; in the Königliche Zoologische Museum, Berlin, show that this species varies in length to 8 mm. and in color, the mesopleuræ being entirely black below the furrow in one case and the abdomen black or blackish all over in another, the third dorsal segment is uniformly convex in some cases while in others there is a slight elevation of the tegument at the base in the middle.

In the punctured apical half of the third segment this species approaches Bathyaulax Szepligeti, as originally described. In the suggestion of a basal area on the third segment it indicates a transition to Digonogastra Viereck. It may be that the males of this species are typical Digonogastra Viereck, this proving to be the case Digonogastra Viereck will have to be reduced to at most subgeneric rank.

This species may be the same as *Bracon semifasciatus* Brullé, from which it can be distinguished at least by the reddish and black mesonotum and the shorter ovipositor.

### ERISTERNAULAX, new genus.

Type.—Eristernaulax leucotænia, new species.

Related to Allotypus Foerster, but tangibly differs in the mesepisternum being provided near its lower edge with an oblique foveolate groove extending almost all the way from the anterior to the posterior edge of the mesopleuræ, in the notauli which are prominent anteriorly, meeting as faint impressions in a shallow pit about twothirds the distance from the anterior edge of the mesonotum; mesepisternum with a clearly defined intumescence in the upper anterior angle, this apparent intumescence being really due to an arcuate impression of the mesepisternum which forms the boundary between the anterior superior and posterior inferior portions of the mesepisternum; labrum conspicuous, the mandibles when flexed not meeting the edge of the clypeus.

### ERISTERNAULAX LEUCOTÆNIA, new species.

Type-locality.—San Bernardino, Paraguay, June 9, K. Fiebrig S. V. Type.—Königliche Zoologische Museum, Berlin.

Female.—Length, 2 mm.; black and polished; face indistinctly punctured, clypeus castaneous, mandibles stramineous with dark tips, malar line a little shorter than the mandibles are wide at base. scape and pedicel stramineous, flagel 31-jointed, all joints at least nearly three times as long as thick and dark brown excepting the sixteenth to nineteenth joints, inclusive, which are whitish; occipital carina interrupted above, the space between the upper ends of the carinæ approximately at least twice as wide as the distance between the lateral ocelli, ocelli nearly equidistant, the lateral ocelli distinctly nearer to each other than to the nearest point on the eye margin; pronotal furrow interrupted medially, laterally foveolate, tegulæ, wing base, and legs, including the coxe stramineous, except the hind tarsi which are dark, wings with a brownish tinge, costa dark brown, stigma and veins brownish stramineous; propodeum with a median longitudinal carina, longitudinal carinæ wanting between the basal transverse carina and the base of the propodeum, lateral longitudinal carinæ virtually complete, basal and apical transverse carinæ present, petiolarea with a transverse carina; metapleuræ wrinkled: first dorsal segment narrower at base than at apex, a little longer than wide at apex, longitudinally striate, brownish stramineous, second segment stramineous, abdomen stramineous apically and ventrally; ovipositor hardly longer than the apical truncature of the abdomen.

Paratopotype.—June 7, K. Fiebrig S. V.

#### Genus EUPHORIDEA Ashmead.

Euphoridea Ashmead, Proc. U. S. Nat. Mus., vol. 23, 1900, p. 116.

Type.—Euphoridea claripennis Ashmead, not described.

This is an undoubted Ancylocentrus Foerster, the type of which is regarded by Marshall as a synonym of the genotype of (Leiophron, Authors not Nees, Haliday¹) = Ancylocentrus Foerster.²

<sup>&</sup>lt;sup>1</sup> The first species to be included under *Leiophron* Nees is conspecific with the genotype of *Pygostolis* Haliday which latter thus becomes a synomyn of the former.

<sup>&</sup>lt;sup>2</sup> In Foerster's classification (Verh. natur. Ver. preuss. Rheinland, vol. 19, 1862, p. 254), line 3 from the bottom of the page, should read nicht gespalten and the last line gespalten.

#### (EUPHORIDEA) ANCYLOCENTRUS CLARIPENNIS (Ashmead).

Type-locality.—Agr. College, Michigan.

Type.—Cat. No. 13073, U.S.N.M.

Female.—Length, 1.75 mm.; related to Ancylocentrus ater Nees, Marshall, from which it differs as follows: Antennæ 23-jointed, scape, pedicel, and first joint of the flagel as well as the mouth and the legs rather stramineous; valves of the ovipositor blackish.

#### ICHNEUTIDEA SECUNDA Rohwer.

=Proteropoides herzogi VIERECK.

Proteropoides herzogi Viereck was based upon an abnormal specimen of Ichneutidea secunda Rohwer.

### MACRONEURA RUFOBALTEATA, new species.

Type-locality.—S. Bernardino, Paraguay, December 19, K. Fiebrig.

Type.—Cat. No. 16216, U.S.N.M.

Female.—Length 17 mm.; apparently related to Bracon interruptus Brullé, from the original description of which it differs as follows: Mandibles mostly black or blackish, palpi translucent brownish; prosternum with black maculations, otherwise the thorax is reddish like the propodeum; pale portions of the legs reddish, fore wings blackish with the second fifth mostly yellowish like the fourth fifth, stigma yellowish except for the blackish base, hind wings blackish, the basal sixth yellowish, the third sixth rather hyaline; abdomen reddish throughout, but of a darker hue than the thorax; ovipositor 67 mm. long.

Allotype.—Essentially as in the type.

Allotype-locality.—Asuncion, Paraguay, Villa Morra, January 26, 1906, J. D. Anisits.

Allotype.—Königliche Zoologische Museum, Berlin. Male paratypes in the Berlin Museum have the hind coxæ and proximal trochanters more or less black or blackish.

# MACRONEUROIDES, new genus.

Type.—Macroneuroides erythropleura, new species.

Closely resembles Macroneura Szepligeti from which it may be known by the abdomen which is simple and lanceolate as in Cyanopteridea Viereck and in the "cubical" head, the temples as seen from the side being at least as wide as the shortest diameter of the eyes and extending laterally almost as far as the outside line of the eyes.

#### MACRONEUROIDES ERYTHROPLEURA, new species.

Type-locality.—S. Bernardino, Paraguay, caught flying, December 18 and 29, K. Fiebrig.

Type.—Cat. No. 16217, U.S.N.M.

Female.—Length 18.5 mm.; black and polished; face more or less sculptured; anterior edge of the clypeus nearly reflexed, mandibles reddish near the base of the inner margin; scape nearly three times as long as thick in the middle, almost cylindrical and expanded at the apex, somewhat as in Atanycolus Foerster, flagel over 50-jointed, its first joint nearly twice as long as the second, a tangible line of demarkation between the vertex and the face: mesonotum reddish black laterally, mesopleuræ below the furrow between the anterior superior region and the rest of the segment, or episternauli and the mesosternum reddish, scutel more or less reddish posteriorly, wings fuscous with blackish veins and mostly testaceous stigma, radial cell near its base with a yellowish band between the stigma and the radius, the same band extending a little below the radius into the second cubital cell, third discoidal cell with a hyaline area in the anterior superior corner; first dorsal segment nearly one and onehalf times as long down the middle as wide at apex and reddish laterally and basally, second and third segments somewhat reddish at base and with an oblique furrow on each side, the dorsum of the abdomen smooth and polished, hypopygium a little longer than the pygidium; exserted portion of the ovipositor 48 mm. long.

A paratype hails from Sapucay, Paraguay, January 23, 1900,

W. F. Foster.

One paratopotype is only 15 mm. long with a correspondingly shorter ovipositor. Paratypes in the Königliche Zoologische Museum, Berlin, are from Asuncion, Paraguay—Sapucay, December, 1904; January 12, 1905, and Villa Morra, December 6, 1905, J. D. Anisits.

One of the paratypes from Sapucay collected by Mr. J. D. Anisits has the second and third segments partly translucent testaceous.

#### METEORUS MAMESTRÆ, new species,

Type-locality.—Rocky Ford, Colorado, bred from Mamestra trifolii, July 11, 1912, H. O. Marsh.

Type and allotopotype.—Cat. No. 16218, U.S.N.M.

Female.—Length 3.5 mm.; this species agrees with *M. vulgaris* Cresson in the absence of fossæ on the first dorsal abdominal segment, in having the greatest diameter of the lateral occili distinctly shorter than the space between them and the eye margin and in having the postpetiole striate, but differs chiefly in having the postpetiole more distinctly striate, in the almost uniformly stramineous color of the body, in the dark stramineous head and in the dorsulum and dorsum

of the abdomen being very pale stramineous as compared with the rest of the body, except that the abdomen is darkened beyond the third segment.

Allotopotype.—Essentially as in the type, with data the same as in the type. This species may prove to be a variety of M. vulgaris

Cresson.

Two male paratopotypes bearing the same data as the type and allotopotype agree with *M. vulgaris* Cresson in color but differ therefrom in that the sculpture is as in the type.

# PHANEROTOMA STRAMINEA, new species.

Type-locality.—Igaripe, Brazil: Type.—Cat. No. 16219, U.S.N.M.

Female.—Length 3.5 mm.; mostly stramineous, sculptured and shining; flagel 21-jointed; closely related to Phanerotoma humeralis Ashmead from which it may be known by the nervulus being very oblique, not at all parallel to the second abscissa of the discoidal vein, and forming an angle of approximately 30° with the first abscissa of the discoidal vein and by the uniformly stramineous dorsulum and scutel. Paratypes are from San Bernadino, Paraguay, March 4, April 12, and June 23, K. Fiebrig and in the Königliche Zoologische Museum, Berlin.

### PHANEROTOMELLA ALBISCAPA (Ashmead).

=Phanerotoma albiscapa Ashmead.

#### APANTELES (PROTAPANTELES) IGLESIASI, new species.

Type-locality.—Sao Paulo, Brazil, Instituto de Butantan, No. 1, F. Iglesias.

Type.—Cat. No. 16220, U.S.N.M.

Female.-Length 2.5 mm.; agrees with the original description of A. (P.) creatonoti Viereck except as follows: Scape and pedicel stramineous at least in front, all veins more or less brownish, hind tibiæ uniformly stramineous with a brownish tinge, propodeum almost entirely smooth and polished; first dorsal plate distinctly but not much wider at base than at apex, entirely pale stramineous as is the rest of the first abdominal segment, second plate fused with the rigid, usually membranous, sides of the second segment except on the basal half where it is defined by furrows, the basal lateral corners of the second dorsal segment stramineous as are the lateral margin of the same segment and the basal, lateral angles of the third dorsal segment, the first dorsal plate one-third or less than one-third as wide at apex as the second plate is wide at its apex, the second dorsal segment, except as noted above, entirely black or blackish, the third dorsal segment longer than the second but not half again as long and black except as noted above, pygidium stramineous, sides of the abdomen partly brownish or castaneous, venter excepting the first segment mostly black. Named in honor of Mr. Francisco Iglesias.

### APANTELES (PROTAPANTELES) CACŒCIÆ Riley.

=Pseudapanteles gallædiploppi Ashmead, Smith's Ins. New Jersey (1899), 1900.

### TRACHAGATHIS, new genus.

Type.—Trachagathis taeniogaster, new species.

Related to Agathis Latreille; front not deeply excavated on each side, with a carina between the eye and the lateral occllus but touching neither the one nor the other, anterior occllus not set in a median boss; mesopleural furrow extending from just in front of the mid coxæ to near the center of the mesopleuræ, notauli distinctly meeting near the beginning of the posterior fourth of the mesonotum, median vein in the fore wings almost completely obliterated, second submarginal cell punctiform, the petiole of the same distinctly longer than the first abscissa of the radius; propodeum exareolate; first dorsal segment nearly four times as long as wide at base. Otherwise essentially as in the genotype of Agathis Latreille.

#### TRACHAGATHIS TÆNIOGASTER, new species.

Type-locality.—San Bernardino, Paraguay, April 9, K. Fiebrig.
Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 4.5 mm.; black and shining, head virtually sculptureless, a little wider than long, maxillary palpi with the first and second joints blackish, the remaining joints stramineous, labrum brownish, its anterior margin rather stramineous, flagel 34-jointed, blackish, the joints longer than thick, scape black and shining, pedicel brownish; mesonotum indistinctly pitted, mesopleuræ sculptured somewhat like the mesonotum except back of the furrow where the tegument is granular like the metapleuræ and hind coxæ, scutel roughened, tegulæ, veins and stigma blackish, membrane with a brownish tinge, all coxe and trochanters and rest of hind legs mostly black or blackish, fore tibiæ and femora mostly stramineous, mid femora and tibiæ brownish and stramineous, tarsi infuscated; first, dorsal segment granular, second segment less granular than the first and with its basal two-thirds as well as its depressed lateral margin stramineous, the third, dorsal segment less granular than the second. the remaining dorsal segments apparently sculptureless and polished; exserted portion of the ovipositor nearly as long as the body.

# ZADIOLCOGASTER, new genus.

Type.—Zadiolcogaster anomus, new species.

Head a little wider in front than long; thorax thicker dorso-ventrally than at its widest from side to side.

Agrees with Ashmead's description of *Dioleogaster* Ashmead. The genotype of the latter genus agrees best with the description of *Protomicroplitis* Ashmead as given in the original. The latter genus may prove to be the same as *Dioleogaster* Ashmead.

### ZADIOLCOGASTER ANOMUS, new species.

Type-locality.—Asuncion, Paraguay.

Type.—Königliche Zoologische Museum, Berlin.

Female.-Length 3.5 mm.; stramineous and shining; scape and pedicel mostly stramineous, flagel 16-jointed, dark brown to blackish, all joints at least a little longer than twice as thick and, excepting the apical joint, constricted medially, making the flagel appear 31jointed, face separated from the malar space by a faint impressed line, ocelli more or less set off by dark marks on the adjoining tegument; mesonotum punctured, the punctures two or three puncture widths apart, scutel with its punctures much more separated than those on the mesonotum, tegulæ and wing base concolorous with the body, wings with a brownish tinge, the membrane beyond the veins darker than the rest, veins blackish like the stigma, areolet in the form of an obtuse angled triangle, the longest side bounding the areolet as long as the petiole, the two combined as long as the radius, claws dark, hind tibiæ with dark tips, hind tarsi dark brown; propodeum virtually sculptureless; first plate parallel sided or nearly so. longitudinally furrowed, nearly three times as long down the middle as wide at base and poorly sculptured in part, apparently mostly smooth, second dorsal segment smooth and polished, with an oblique furrow on each side of the basal half, hypopygium longer than the pygidium; ovipositor exserted, the sheaths blackish, shorter than the hind metatarsi.

Allotopotype.—Essentially as in the type. Cocoon 5 by 1.5 mm., snow white and covered with loose silk.

The types and paratopotypes are labeled No. 59; 18,14/xi,'05 and 19, 14/xi,'05, J. D. Anisits.

#### Genus ZELOMORPHA Ashmead.

Zelomorpha Ashmead, Proc. U. S. Nat. Mus., vol. 23, 1900, p. 129.

Type.—Zelomorpha arizonensis Ashmead, not described.

Related to *Disophrys* Foerster from the genotype of which it differs, especially in the shorter malar space, which is distinctly less than half as long as the eye, in the flattened mandibles, which are modified to slide over each other like the blades of a pair of scissors, by the rostrum which hardly extends farther beyond the labrum than the latter is long, by the face which is poorly produced between the antennæ, by the antennal carinæ hardly surpassing the scrobes, by the absence of a branch to the second transverse cubitus and by the second dorsal, abdominal segment being distinctly longer than wide.

### ZELOMORPHA ARIZONENSIS Ashmead.

Type-locality.—Arizona.

Type.—Cat. No. 16221, U.S.N.M.

Female.—Length 8.5 mm.; head, thorax, and propodeum reddish; lateral ocelli oval, distinctly nearer to the eye margin than to each other, the distance between them and the nearest eye margin shorter than the shortest diameter of the same ocelli, flagel more than 23jointed, with all the joints to the twenty-third inclusive distinctly longer than thick, with appressed pubescence and almost equidistant, almost erect, isolated setæ, antennæ brownish throughout, mouth parts mostly pale brown, mandibles rather stramineous, castaneous beyond the middle except for the blackish tips, space between ocelli dark brownish; tegulæ and wing base brownish, fore and mid coxæ rather stramineous with a brownish tinge, rest of fore and mid legs mostly brownish, hind legs with their coxe, trochanters and femora reddish, their tibiæ reddish brown except for the brownish base and apex, their tarsi dark brown; wings transparent with a brownish tinge; the stigma and veins brownish; second transverse cubitus angulate at or a little below the middle; propodeum with ten areæ the areola forming an acute angled triangle, the petiolarea forming a hexagon twice as long as its greatest width; first, dorsal segment blackish, smooth and shining, at least one and one-half times as long as wide at apex and nearly three times as wide at apex as at base; first to third inclusive and most of fourth, dorsal segments black or blackish, rest of abdomen rather reddish stramineous, second segment parallel sided, somewhat longer than wide and not impressed laterally; hypopygium a little shorter than the pygidium, the sheaths brownish with stramineous tips and apparently a little shorter than the second segment is wide, ovipositor brownish stramineous and curved downward. A paratopotype in the collection of the American Entomological Society has the flagel 41-jointed and the first, dorsal segment rather reddish. In four paratypes from Laredo, Texas, May 27, the dorsum of the abdomen is usually mostly reddish and in one specimen the thorax is partly asymmetrically blackish.

The above descriptions are the result of a comparison of a specimen of the genotype of *Disophrys* Foerster from Blankenburg, Germany, with the material noted above. In other important particulars the

two species agree.

# Family ICHNEUMONIDÆ.

# AGLAOJOPPIDEA, new genus.

Type.—(Trogus) Aglaojoppidea fascipennis (Cresson).

Judging from descriptions this is related to Aglaojoppa Cameron, from the original description of which it differs in the female in the propodeum being exareolate except for the basal transverse carina

which is almost complete and the median longitudinal carine which extend from near the basal transverse carina all the way to the apex, in the apex of the hind femora reaching apparently a little beyond the apex of the fourth, dorsal segment and in the apical, dorsal segment being only half as long as the penultimate segment, and in the male in the pygidium being distinctly less than half as long as the penultimate segment. In the male there is no fold to the ventral segments.

AGLAOJOPPIDEA PICTIPENNIS, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, March 20, 1905, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 13.5 mm.; essentially as in (Trogus) Aglaojoppidea fascipennis (Cresson) from which it may be known by its concolorous abdomen.

Allotype-locality.—San Bernardino, Paraguay; K. Fiebrig, collector.

Allotype.—No. 16222, U.S.N.M. Essentially as in the type.

### CRYPTANURIDIMORPHA, new genus.

Type.—Cryptanuridimorpha elegans, new species.

Carina bordering the posterior cavity of the mouth highly developed and meeting to form a tubular cavity, front with a solitary spine; notauli deep, are olet closed, recurrent vein interstitial; spiracles of the first, abdominal segment nearer to each other than to the apex. Related to *Polycyrtus* Spinola.

#### CRYPTANURIDIMORPHA ELEGANS, new species.

Type-locality.—Chauchamayo, Peru; W. F. H. Rosenberg.

Type.—Cat. No. 16223, U.S.N.M.

Male.—Length 17.5 mm.; reddish brown and polished; clypeus and mandibles yellowish, the latter black at tips, rest of head mostly black excepting the palpi and the tubular portion of the mouth which are stramineous and the eleventh to fifteenth joints of the flagel, which are whitish beneath; the following joints are broken off in the type and lost; fore legs brownish stramineous, the second and following joints of their tarsi blackish, mid legs almost concolorous with the body, their tarsi blackish, hind legs concolorous with the body, their tarsi blackish, hind legs concolorous with the body, except their femora, tibiæ and basal three-fourths of their metatarsi which like the apical two-thirds of the onychii are black or blackish, the rest of the hind tarsi whitish, wings tinged with brown, the stigma and veins dark brown to blackish; propodeal spines directed upward, outward and backward and blunt; first abdominal segment mostly reddish brown, the postpetiole, however, black, the following dorsal

segments black and shaggy with coarse whitish hairs, the ventral segments stramineous and shaggy in much the same way as the dorsal segments.

# CRYPTOPHION, new genus.

Type.—Cryptophion strandi, new species.

Clypeus with a transverse carina, not at all separated from the face, malar line nearly as long as the mandibles are wide at base, occiput not extending above the hind edge of the eve as seen from the side, hind ocelli apparently a little nearer to each other than to the occipital carina, eyes subemarginate, almost parallel, slightly converging below; presternum produced into a shelflike process supporting the head, anterior coxe almost cubical, epicnemia not furcate, notauli wanting, scutel laterally carinate nearly to the middle; hind legs decidedly longer than the mid or fore legs, their coxe pyriform, their tibie nearly twice as long as their metatarsi, longer spur fully two-thirds as long as their metatarsi, third tarsal joint about two-thirds the length of the second, fourth about two-thirds the length of the third, fifth distinctly though not much longer than the fourth, their claws angulate at base, nervulus almost interstitial, recurrent vein interstitial with the second transverse cubitus, areolet petiolate, forming an equilateral triangle, nervellus postfurcal, not broken; propodeum channeled, biangulate, its spiracles approximately three times as long as wide at the middle of the upper third; abdomen depressed to the end of the second segment, compressed beyond, apex of abdomen truncate, ovipositor almost as long as the truncature.

This is a transition genus between Cryptinæ and Ophioninæ. Sternauli complete, undulate and foveolate as in some Cryptinæ; propodeum at most not attaining the end of the basal third of the hind coxæ; first abdominal segment geniculate, its spiracles nearer to the apex than to each other, petiole depressed, wider than thick dorsoventrally. Habitus as in Campoplegini. This genus probably will eventually represent a new tribe.

#### CRYPTOPHION STRANDI, new species.

Type-locality.—Asuncion, Paraguay, Villa Morra, November 9, 1905, J. D. Anisits.

Type.—Köngliche Zoologische Museum, Berlin.

Female.—Length 6.5 mm.; black, shining, covered with pale golden pubescence, mostly rugoso-purctate, rugose or recticulate; antennæ brownish, mandibles yellowish with reddish brown tips, palpi stramineous; shelf-like process of the presternum stramineous, fore and mid legs lemon yellow excepting their onychii which are brownish and the pectinate claws and empodii which are blackish, the collar-like flange of the pronotum stramineous, tegulæ and wing bases yellowish, wings

brownish, scutel with a U-shaped border of radiating hairs, hind coxe black, brownish, and yellowish, hind femora and hind tibiæ reddish brown, the latter brownish at base and apex with brownish spurs, hind tarsi yellowish excepting their appendages which are blackish; propodeum virtually crowded out by the transverse oblong areola, petiolarea excavated and occupying the greater portion of the apical five-sixths of the propodeum, propodeal protuberances laminate and directed outward, backward, and downward; abdomen reddish and yellowish and more or less covered with blackish stains, first, dorsal segment mostly stramineous, its spiracles nearer to the apex than to each other.

### CRYPTOPTERIGIMORPHA, new genus.

Type.—Cryptopterigimorpha tubulifera, new species.

Related to Cryptanuridimorpha Viereck with the original description of which it agrees except in the recurrent vein, which is not interstitial.

In a more rational classification of the Ichneumonidæ than is now popular these two genera will represent at least a new tribe because of the unusual conformation of the oral cavity.

### CRYPTOPTERIGIMORPHA TUBULIFERA, new species.

Type-locality.—Piches and Perene Vs, Peru Soc. Geog. de Lima; altitude 2,000–3,000 feet.

Type.—Cat. No. 16224, U.S.N.M.

Female.—Length 14 mm.; brownish stramineous and shining; head and antennæ mostly black, palpi stramineous, mandibles yellow with blackish tips, clypeus partly brown, part of the third, all of the fourth to the tenth joints, inclusive, and most of the eleventh joint of the flagel whitish, the fifteenth and many of the following joints of the flagel facetted above, the malar space shagreened or granular while the rest of the head is rather polished and punctured; prothorax, mesonotum and the anterior edge of the mesopleuræ mostly black or blackish, fore and mid legs paler than the body and the hind legs, their tibiæ rather sinuate, their second tarsal joint at the tip and the following tarsal joints entirely blackish, hind tarsi whitish, their claws dark brown, wings tinged with brown, their veins dark; propodeum exceedingly as in Cryptopteryx Ashmead, the spines rather truncate at the tip; sheaths of the ovipositor nearly half as long as the abdomen.

### DIAGLYPTIDEA, new genus.

Type.—Diaglyptidea roepkei, new species.

Agrees with the original description of Diaglypta Foerster. Diaglypta (Foerster) Ashmead does not agree with the original description of Diaglypta Foerster, and is related to Allocota (Foerster) Ashmead.

#### DIAGLYPTIDEA ROEPKEI, new species.

Type-locality.—Salatiga, Java, labeled, "Ex. Zaratha oramerella, W. Roepke."

Type.—Cat. No. 15340, U.S.N.M.

Female.—Length, 4 mm.; face as seen from in front with the proportion of its greatest width to the length from the top of the head to the anterior edge of the clypeus as 37:25, lateral ocelli apparently a little nearer to the anterior ocellus than to each other, but apparently a little nearer to each other than to the eye margin, head black. front polished laterally, sculptured medially, face finely sculptured, elvpeus punctured, its anterior edge virtually straight, cheeks, temples, and malar space polished, mouth parts, including the mandibles and palpi, various shades of pale stramineous, the mandibles with castaneous tips, maxillary palpi distinctly longer than the head is wide in front, the third joint longest and apparently as long as the first flagellar joint, which latter is apparently ten times as long as wide at base, scape and pedicel pale stramineous, almost whitish like the palpi, flagel 29-jointed and blackish brown except for the first and second joints, which are brownish stramineous except for the second joint, which is apically concolorous with the rest of the flagel; thorax and its appendages, except as noted below, stramineous, dorsulum and scutel finely sculptured and dullish; claws and empodii brownish. mid and hind onychii blackish or brownish but stramineous at base, wings almost colorless but with a faint brownish tinge, the costa dark, the stigma and veins stramineous, nervellus broken a little below the middle, arcolet unusual in outline for this tribe, in that it forms an oblong with the upper side undeveloped; propodeum stramincous except for the first pleural area and the basal area, which are black, areola partly brownish, propodeum sculptured and shining; abdomen stramineous except for blackish marks on the first, dorsal segment and a black pigmentation extending from the apical third of the second segment down the middle of the dorsum almost to the end of the fifth, dorsal segment without a break except for the stramineous edges of the segments involved, first, dorsal segment longitudinally striate except along the apical margin, second, dorsal segment more or less longitudinally striate, thyridia shining, the space between them narrower than the greatest length of either of the thyridia, the remaining dorsal segments polished, exserted portion of the ovipositor a little longer than the first, dorsal, abdominal segment.

Allotype.—Differs from the type especially in the first joint of the flagel, which is apparently seven times as long as wide at base, in the 25-jointed flagel, which has the first joint apically and the second joint entirely concolorous with the rest of the flagel, in the thorax which is black with mostly pale appendages barring all the tarsi and

the hind tibiæ which are brownish, in the wings, which are distinctly tinged with brown and have a black stigma and dark-brown veins, in the black propodeum, and in the abdomen, which is black except for the lateral margin and the apical margin laterally on the second segment as well as some of the margins of the ventral segments, all of which are more or less stramineous. A series of paratopotypes of both sexes indicate that this is a constant species.

Named in honor of Dr. W. Roepke.

### DIGONOCRYPTUS, new genus.

Type.—Digonocryptus bidens, new species.

Related to *Hoplocryptus* Thomson, from which it differs in the clypeus having a transverse elevation that is emarginate medially, in the anterior edge of the clypeus being bidenticulate, in the interstitial nervulus, in the parallel sided areola, in wanting an apical transverse carina on the propodeum except for a bare indication in the form of an elevation of the tegument on each side and by the virtually non-carinate first segment.

### DIGONOCRYPTUS BIDENS, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, April 10, 1905, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length, 11 mm.; black and shining; head, thorax, and their appendages colored in much the same way as in the genotype of Monogonocryptus Viereck, except that the basal half of the mandibles, which is mostly yellowish, the mesopleuræ, which are yellowish except along the edges and along the sternauli, in the mesosternum which is brownish with a yellowish mark posteriorly, in the propleure, which are yellow laterally and posteriorly, in the fore and mid femora, which are yellow above and stramineous at the base, in the hind legs, the coxe, trochanters, and base of femora of which are brownish except for the yellowish white superior face of the coxe, their femora mostly black, their tibiæ and tarsi yellow except the claws and empodii, which are brown and in the metapleuræ and sides of the metanotum, which are mostly yellow; propodeum with its confluent basal area almost polished with a yellow area on each side near the spiracles and at the base in the middle, rest of the propodeum striate with a yellow border on each side and a yellow band down the middle, the apical transverse carina angularly produced on each side; dorsal abdominal segments with a yellow border laterally and apically excepting the apical segment, which is bordered with vellow only laterally, venter yellowish excepting the second and third segments, which are more or less brownish, sheaths of the ovipositor apparently as long as the first and second, abdominal segments combined

### EPIOPELMIDEA, new genus.

Type.—Epiopelmidea erythrogastra, new species.

Related to *Hepiopelmus* Wesmael from which it differs especially in the Joppa-like head, in the slenderer teeth, of the mandibles, in the apical joint of the hind tarsi not being distinctly longer than the third but almost exactly as long as the same, in the virtual absence of the apical, propodeal carina, in the absence of a juxtacoxal area and in the longer hypopygium which almost extends as far as the pygidium. Habitus as in *Patroclus* Cresson.

#### EPIOPELMIDEA ERYTHROGASTRA, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, October 1, 1905, December 19, 1904, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length, 12.5 mm.; black, shining and punctured; orbits excepting the malar space, basal half of mandibles, lateral edge of clypeus and more or less of the sixth to thirteenth joints of the flagel vellowish, almost all of the pale joints of the flagel blackish at apex beneath, labial palpi blackish, maxillary palpi stramineous; pronotum with a yellow margin along its upper and lower edg's, propleuræ with a submarginal yellowish stripe, fore and mid legs with their coxæ and proximal trochanters mostly yellow and stramineous, rest of these legs stramineous except the third to fifth tarsal joints which are mostly blackish, tegulæ and wing bases more or less, a longitudinal stripe on each side of the mesonotum, disk of scutel and postscutel, intumescence beneath the forewings and back of the mesopleuræ and two almost confluent large marks on the mesopleuræ yellow, wings brownish with blackish veins and a stramineous stigma, metapleuræ mostly yellow, hind legs reddish stramineous, except for a large yellow mark on their coxæ above, their tibiæ and metatarsi which are mostly stramineous and the rest of their tarsi which are blackish; abdomen reddish except for the yellow apical half of the postpetiole, ovipositor hardly exserted.

# JOPPOCRYPTUS, new genus.

Type.—Joppocryptus egregius, new species.

This is a Cryptine, with a Joppine habitus, that differs from Cryptopteryx Ashmead, to which it bears some resemblance, especially as follows: Cheeks much wider near the mandibles than opposite the middle of the eyes, clypeus planate, its anterior margin truncate, mandibles falcate, deeply cleft, the outer tooth distinctly longer than the inner tooth, occipital carina joining the carina bordering the

mouth where the latter meets the hind edge of the base of the mandibles, face somewhat impressed between the scrobes, the impression bordered by a more or less well developed carina, antennæ spindle shaped in outline, flattened on one side beyond the middle; notauli represented by rugæ, scutel carinate laterally almost to the apex; propodeum with median and lateral, longitudinal carinæ, well separated from the metapleuræ by a carina, spiracularea and second pleural areæ confluent, area dentipara and the third lateral areæ confluent, petiolarea nearly three times as long as the areola, juxtacoxal area outlined; spiracles of first abdominal segment nearer to the apex than to each other, second segment with yellowish gastrocoelæ that are about as far from each other as from the base of the segment, thyridia present on the second segment.

In view of the evident confluence of characters found in the Ichneumoninæ with characters found in the Cryptinæ that is shown by this genus it may become necessary to assign it to a new tribe in the

Cryptinæ.

### JOPPOCRYPTUS EGREGIUS, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, February 12, 1905.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length, 9 mm.; brownish stramineous and shining; head black except as follows: Beveled area of the face below the scrobes and the portion of the face adjoining the clypeus brownish to brownish stramineous, clypeus, malar space and lower end of cheeks stramineous, mandibles yellowish except for the blackish tooth and tips, palpi stramineous, joints of the flagel with the apical half of the eighth, the ninth to thirteenth, inclusive, entirely or almost entirely and the fourteenth to seventeenth inclusive, beneath, yellowish white, front with a yellowish margin bordering each eye; hind femora blackish, hind tarsi vellowish except for the onychii which like the onychii of the other legs are more or less blackish, rest of tarsi and all the tibiæ paler than the thorax, rather stramineous, wings transparent with a brownish tinge, stigma stramineous, veins blackish; propodeal spines prominent, the propodeum reticulately sculptured; abdomen mostly sericeous and rather punctately sculptured, its petiole brownish translucent except for the black tip, postpetiole smooth and polished except for its apical corners which are punctured and black except for an apical stramineous edge, thyridia stramineous, third to seventh segments inclusive, with an apical yellow edge, second and third ventral segments yellowish, ovipositor longer than the first, abdominal segment, exserted portion of the sheaths of the ovipositor nearly as long as the fourth, dorsal, abdominal segment.

### LAMPROCRYPTIDEA, new genus.

Type.—Lamprocryptidea magnifica, new species.

Agrees with the original description of Lamprocryptus Schmiede-knecht except in the absence of notauli, in the scutel lacking sharp keels, in the apical propodeal carina being represented by two blunt, truncated processes, in the propodeal spiracles being oval, in the open arcolet with the outer side wanting, in the longer tibial spurs being at least half as long as the hind metatarsi, and in the ovipositor being hardly one-third the length of the abdomen. Hind coxe not cylindrical nor nearly as long as the first segment of the abdomen; spiracles of the first abdominal segment nearer to each other than to the apex; front raised into a carinate swelling close to the junction of the front with the eyes. Regarded as a Mesostenine this genus would be allied to Crypturopsis Ashmead.

#### LAMPROCRYPTIDEA MAGNIFICA. new species.

Type-locality.—Asuncion, Paraguay, Villa Morra, February 12, 1905, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length, 15 mm.; black, rather dull, mostly shagreened; palpi stramineous, fifth to eleventh joints, inclusive, of the flagel entirely or mostly whitish on the upper side, head mostly punctured or rugose; wings transparent, brownish with blackish veins, fore and mid legs, hind coxæ, and trochanters mostly reddish stramineous, excepting the onychii and their appendages which are mostly blackish; propodeum mostly reticulated, its processes brown, directed backward, outward, and slightly upward; petiole castaneous, the abdominal segments beyond the second with a sericeous bloom, the sixth dorsal segment luteous at its apex, the seventh dorsal segment with most of its upper aspect luteous, sheaths of the ovipositor approximately as long as the first abdominal segment.

# MONOGONOCRYPTUS, new genus.

Type.—Monogonocryptus diversicolor, new species.

Appears to be related to Caenocryptus Thomson and certainly related to Digonocryptus Viereck, from which it differs in the anterior edge of the clypeus having but a single median tooth, in the transverse elevation not being interrupted in the middle by an emargination, in the nervulus uniting with the media before the basal vein, in the converging sides of the areola, in the presence of a complete apical transverse carina, and in the spiracles of the first segment being as near to or a little nearer to the apical edge as to each other.

### MONOGONOCRYPTUS DIVERSICOLOR, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, November 19, 1905, J. D. Anisits.

Type.—Königliche Zoologishe Museum, Berlin.

Female,—Length, 13 mm.; black and shining; an orbital margin, greater part of lower half of the cheeks, face, except where it joins the black granular malar space, clypeus except laterally and on its anterior beveled margin as well as the labrum yellow, seventh to thirteenth joints, inclusive, of the flagel mostly yellowish, mandibles blackish brown throughout, palpi whitish, the apical joint of the maxillary palpi brownish; pronotum with its anterior and superior margins mostly yellow, wing bases, disk of the scutel and postscutel, and the swollen superior margin of the mesopleuræ yellow, the tegulæ rather whitish, wings almost colorless except for a brownish tinge and blackish stigma and veins, fore and mid legs with their coxe and trochanters mostly yellowish white, their femora blackish with a vellow stripe above, apically, their tibiæ vellow, the fore tibiæ cylindrical, except for the rather constricted, tapering base, the cylindrical portion apparently four times as long as thick, their tarsi brownish to black, hind legs reddish excepting the tibiæ and tarsi which are yellow barring the apical edge of the fourth joint which is brownish, and the onychii and their appendages which are black: propodeum with the confluent basal area almost bare excepting the spiracularea which is rather sericeous like most of the rest of the propodeum which latter is mostly dullish rugose or rugulose; petiole apically and the postpetiole basally black, elsewhere the first dorsal segment is vellow, second dorsal segment black with the lateral margin and an apical border more or less yellow, third dorsal segment blackish at base, rest of the dorsal segments reddish, ventral plica vellowish, rest of venter mostly brownish stramineous, sheaths of the ovipositor apparently longer than the first abdominal segment.

#### Genus NONNUS Cresson.

This genus is more properly placed in the Campoplegini than in the Labenini and differs from Zachresta Foerster as represented by Zachresta popofensis Ashmead especially in the cheeks being less than half as wide as the eyes, in the eyes converging below though not to as marked a degree as in Cymodusa Holmgren, in the slitlike propodeal spiracles which extend to the metapleural carinæ, in the propodeum having only a basal and apical carina, in the hind coxæ being rather cylindrical and almost if not quite three times as long as thick at the thickest portion, in the sessile, pentagonal areolet, in the nervulus being as far beyond the basal vein as the former is long, in the third abscissa of the discoidal vein being as long as the second, in the nervellus being broken a little below the

junction of its middle with its basal third, and by the second dorsal segment being at least three or nearly three times as long down its middle as wide at apex. In Zachresta Foerster as represented by the above species the propodeum hardly extends beyond the insertion of the hind coxæ. Ophionocryptus Schmiedeknecht is manifestly synonymous with Nonnus Cresson.

### PEZOMACHUS (PEZOMACHUS) APANTELICIDA, new species,

Type-locality.—Japan.

Type.—Cat. No. 13086, U.S.N.M.

Female.—Length 3 mm.; first joint of flagel longer than the second, three times as long as thick in the middle or a little longer, fifth joint of flagel twice as long as thick in the middle, flagel 16-jointed, the joints excepting the apical joint cylindrical, antennæ stramineous to brownish, head black, finely sculptured, impunctate, brown, blackish posteriorly and along the sutures; thorax finely sculptured, impunctate, brown, blackish posteriorly and along the sutures, legs excepting their tibiæ and femora pale stramineous, their femora stramineous, translucent, their tibiæ more or less infuscated except at base and in the middle where they are more or less pale stramineous; propodeum as long as or longer than the thorax as seen from above, propodeal carinæ reduced to a comma-like ridge on each side; first, dorsal, abdominal segment gradually broadened out from the base to the apex where it is nearly three times as wide as at the base, stramineous, translucent, infuscated basally, second, dorsal segment similar to the first in color, the succeeding dorsal segment black, abdomen impunctate and nearly shining to polished, more or less sculptured with an exceedingly fine reticulation, exserted portion of the ovipositor nearly as long as the first, abdominal segment.

Allotopotype.—Length somewhat greater than in the type; first joint of the flagel longer than the second, four times as long as thick in the middle, flagel 20-jointed; thorax mostly blackish, apterous, legs colored as in the female except that the hind tibiæ are darker; propodeum with its comma-like carinæ supplemented by a basal carina; first, dorsal, abdominal segment hardly twice as wide at apex as at base, longitudinally impressed, infuscated except for a broad apical band which is stramineous, second, dorsal segment similar to the first in its color scheme; otherwise essentially as in the type.

In the male paratopotypes there is a tendency toward the obliteration of the depression of the first, dorsal segment, toward dark brown, hind femora, darker hind tibiæ and a greater extent of yellowish on the first and second dorsal segments, than in the type. In the paratypes the size varies in either sex down to 2 mm. Seven female and four male paratypes were examined.

# PHAENOLABRORYCHUS, new genus.

Type.—Phaenolabrorychus anisitsi, new species.

Related to Labrorychus Foerster, but differs greatly in the remarkably produced propodeum which has a smooth cylindrical process extending from the base of the hind coxæ almost to the apex of the proximal joint of the hind trochanters, by the propodeal spiracles being apparently concealed in a pit, by the furrowed scutel, by the hind ocelli almost adjoining the occipital carina, by the anterior edge of the clypeus which is rounded and provided with two nipple-like processes, by the presence of notauli, by the decidedly antifurcal nervulus, by the nervulus not being broken, by the hind metatarsi being nearly four times as long as the succeeding joint and by the second abdominal segment being approximately as long as the first. The above description is based upon a comparison with a male of Labrorychus tenuicornis Gravenhorst.

### PHAENOLABRORYCHUS ANISITSI, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, June 20, 1905, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 16 mm.; reddish brown, sculptured and shining; head of a peculiar yellowish red color except the greater part of the front, vertex and occiput which are black, mandibles dark stramineous with blackish tips, scape yellowish brown, rest of antennæ dark brown to blackish, front punctured and with a poorly defined median longitudinal welt on each side of the middle; dorsulum, mesopleuræ and mesosternum mostly black, tegulæ yellowish, scutel yellowish-brown, fore and mid legs brownish stramineous, their empodii blackish, their claws brown, the latter toothed, hind legs mostly black or blackish, their coxæ and trochanters partly castaneous, with stramineous, wings brownish, almost colorless, with blackish veins; propodeum reticulated, its process brownish stramineous; first abdominal segment black, the remaining abdominal segments reddish brown, with a blackish tinge but not concolorous with the thorax and propodeum.

# PHOTOCRYPTUS, new genus.

Type.—Photocryptus photomorphus, new species.

Related to *Cryptus* Fabricius from which it differs especially in the slender first, abdominal segment which has its spiracles nearer to each other than to the apex, but nearer to the apex than to the base and its petiole nearly cylindrical and not at all carinate, in the mesonoto-scutellar carina not reaching to the middle of the scutel, in the distance between the lateral ocelli being apparently a little less in the female

and a little greater in the male than the distance between them and the nearest point on the eye margin and in the nervellus being antefurcal.

PHOTOCRYPTUS PHOTOMORPHUS, new species.

Type-locality.—Sapucay, Asuncion, Paraguay, December, 1904, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 14 mm.; yellow and shining, front, except a border along the eyes and back of the ocelli, vertex and superior half of the occiput, superior aspect of the pedicel and the flagel mostly black, the latter brownish near its base beneath, mandibles with blackish tips, mesonotum with lateral, median and a posterior band black, scutch black posteriorly, mesosternum black except for a yellow band on each side, mesopleure with a black mark adjoining the prepectal carina and a black band near the superior margin. prepectus mostly black, wings including the stigma and the veins of the outer half yellowish stramineous, the remaining veins blackish. fore and mid legs almost entirely vellow, their onychii and the appendages of the latter more or less brownish, hind legs with vellow coxe that are black at the base beneath and at the apex above. their proximal trochanter yellow beneath, black above, their distal trochanter mostly blackish, their femora mostly vellowish on the basal half and testaceous on the apical half, their tibiæ yellow or vellowish at base and above and beneath, elsewhere brownish, their tarsi mostly blackish, their metatarsi pale beneath, metapleuræ and mesopleure black along their contiguous edges; propodeum black in front of the basal transverse carina and with a blackish mark on each side and down the middle back of the basal transverse carina; first, abdominal segment with blackish sides and with most of the posterior fourth of the petiole and all but an apical margin of the postpetiole brownish, all but an apical margin and a narrow lateral margin of the second, dorsal segment brownish or black, the third, dorsal segment brownish and yellow at base, thence black with an apical yellow margin as in all except the apical segment. the remaining segments black with an apical yellow margin that occupies all or nearly all of the sides of the segment, apical dorsal segment black, ventral abdominal segments colored in much the same way as the dorsal segments, sheaths of the ovipositor somewhat longer than the abdomen.

# PHOTOPTERA, new genus.

Type.—Photoptera erythronota, new species.

Related to *Paraphylax* (Foerster) Ashmead from which it differs especially in the well defined notauli and in the *Diaghyptidea*-like palpi.

### PHOTOPTERA ERYTHRONOTA, new species.

Type-locality.—Salatiga, Java, labeled, "Ex. Zaratha oramerella," W. Roepke.

Type.—Cat. No. 15341, U.S.N.M.

Female.—Length 4 mm.; differs from the original description of Diaglyptidea roepkei Viereck as follows: Head larger but the ratio of dimensions virtually the same; front finely sculptured laterally, anterior edge of the clypeus slightly arcuate and with inequalities, the latter appearing somewhat like the teeth on the anterior edge of the clypeus in Polytribax (Foerster) Viereck, first joint of the flagel apparently eight times as long as thick at base, scape and pedicel stramineous, flagel 21-jointed, the first and second joints more or less brown; thorax reddish, tegulæ stramineous, fore and hind legs mostly stramineous with a blackish tinge, hind legs, in color, analogous to the fore and hind legs except in being darker and with blackish stains and in having the tibiæ and metatarsi mostly black, the former with a whitish band at the base, wings maculated after the same pattern found in Hemiteles areator Panzer. with, in addition, the apical third of the hind wings blackish, the veins and stigma black, areolet with sides of equal length, scutel mostly polished, propodeum reddish except for blackish stains; abdomen black above except for an apical margin to the first, seventh, and eighth segments which is stramineous, the stramineous portion of the segments as well as an apical margin to the second and third, the apical half of the fourth and the remaining, dorsal segments all polished; elsewhere the dorsum of the abdomen is more or less striato-punctate, thyridia rudimentary and represented by small depressions.

Allotopotype.—Chiefly as in the type but with the anterior edge of the clypeus more as in Polytribax (Foerster) Viereck, the flagel 21-jointed, the front and vertex mostly polished as is the dorsulum and the propodeum; the thorax, propodeum and hind femora black; abdomen black above, smooth and mostly polished except for the stramineous apex of the first segment and the stramineous base of

the second segment.

One female paratopotype is apparently only two-thirds as long as the type.

# POLYAENIDEA, new genus.

Type.—Polyaenidea pretiosa, new species.

Regions of the mesonotum prominent, notauli deep and distinct; spiracles of the first, abdominal segment in the females as near or nearer to the apex than to each other, in the males nearer to each other than to the apex; front armed with two spines as in *Polyaenus* Cresson.

Related to Polyaenus Cresson.

#### POLYAENIDEA PRETIOSA, new species,

Type-locality.—Sapucay, Asuncion, Paraguay, December 2, 1904, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 12.5 mm.; black and shining; face and clypeus mostly, labrum entirely luteous, cheeks mostly luteous as is the front along the eye margins, palpi yellowish with the apical joints rather brownish, tip of fourth and most of fifth to thirteenth flagellar joints. inclusive, yellowish, head including the mandibles more or less punctured, region of the malar line rugulose or granular; pronotum on each side of its upper and lower edge with a yellowish area, the upper edge in addition with an angular production on each side from which there descends a carina, propleuræ yellow near the edge nearest the coxæ. the edge resting on the fore coxe stramineous, prescutum and scapulæ punctured especially anteriorly, the former with a large vellow spot posteriorly, tegulæ luteous internally stramineous externally, wings with a brownish tinge, their veins mostly blackish, anterior edge of the axillæ yellow except near the disk of the scutel which latter as well as the posterior edge of the axillæ are yellow, disk of the post scutel and the posterior edge of the same yellow, pleuræ with most of the lower half and a spot on the upper edge vellow, mesosternum vellow except laterally and down the middle, a spot under the hind wings and most of the metapleuræ yellow, fore coxæ yellow in front. brownish stramineous behind, hind coxæ and rest of legs mostly brownish stramineous, fore and mid onychii blackish; propodeum with a yellow stripe on each side involving the propodeal spines which are directed outward, backward, and upward; abdomen reddish brown, sheaths of the ovipositor approximately 4 mm. long.

Allotype.—Essentially as in the type but with the ninth to thir-

teenth flagellar joints yellowish.

# POLYCYRTIDEA, new genus.

Type.—Polycyrtidea gracilis, new species.

Occipital carina meeting the carina bordering the posterior cavity of the mouth, malar line approximately as long as the mandibles are wide at the base; propodeum with only a basal carina and without spines; first, abdominal segment almost cylindrical, apparently six times as long as wide at the apex.

Agrees with *Polycyrtus* Spinola in having a solitary spine on the front, in the deep notauli and in the spiracles of the first, abdominal segment being nearer to each other than to the apex but differs espe-

cially in the areolet being open.

#### POLYCYRTIDEA GRACILIS, new species.

Type-locality.—C. Laureles, Asuncion, Paraguay, Jan. 27, 1906, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 11 mm.; head mostly yellow, its front, vertex, and occiput mostly black, frontal spine rather blunt and black, scape brownish, yellow beneath, pedicel brownish with a yellow mark above, fifth to fourteenth flagellar joints testaceous, rest of the flagel dark brown to blackish, tips of the mandibles blackish, palpi yellowish; pronotum with its upper edge produced on each side into a blunt process, this same edge as well as the lower edge with a yellow border that is medially interrupted, tubercles yellow, fore coxe and trochanters and the fore femora beneath yellow, rest of fore legs brownish stramineous except the onychii which are blackish, prescutum with a yellow spot on each side, scapulæ with a yellow border anteriorly and internally, mesopleuræ with four yellow spots, the uppermost two being united, tegulæ yellow with a stramineous outer edge, scutel and upper edge of axillæ mostly yellow as are the metapleuræ, elsewhere the thorax is mostly black, mid legs with the same color scheme as the fore legs, hind legs reddish brown excepting the coxe which are yellow and black, the yellow proximal trochanters, the brown distal trochanters, the blackish tips of the tibiæ and the tarsi which excepting the blackish onychii are whitish; propodeum with a vellow arch the sides of which are partly welts and lateral, low protuberances; abdominal segments brownish or blackish with broad vellow borders, the first segment excepted, which is mostly vellow with the apical half discally mostly blackish; sheaths of the ovipositor 1.5 mm. long.

# POLYCYRTIMORPHA, new genus.

Type.—Polycyrtimorpha amoenus, new species.

Related to *Polycyrtus* Spinola from which it differs chiefly in the occipital carina meeting the carina bordering the posterior cavity of the mouth.

#### POLYCYRTIMORPHA AMOENUS, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, 10-4-04, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 15 mm.; black and polished; face, clypeus, labrum, mandibles, malar space, lower half of cheeks, lower half of occiput, orbital margin, palpi and fifth to thirteenth flagellar joints inclusive mostly yellow; upper and lower edge of the pronotum with a yellow margin, propleuræ, mesopleuræ, and mesosternum mostly yellow, tegulæ, wing bases, edges of the axillæ, posterior half of the disk of the scutel, disk of the postscutel, the hind edge of the latter,

the intumescence back of the hind wing insertion and the metapleuræ mostly yellowish, the latter rather testaceous, wings brownish with blackish veins and stigma, the latter with a pale streak, legs mostly brownish stramineous, the fore coxæ mostly yellowish, all coxæ with a dorsal black stripe, the fore and mid onychii mostly black; basal propodeal area with a great, yellow, comma-like mark on each side, the apical propodeal area with a broad yellow stripe on each side, involving the prominent spines; dorsal, abdominal segments margined laterally and apically with a broad yellowish band, the lateral margin of the second and third, dorsal segments with a yellowish extension toward the middle of these segments, ovipositor almost as long as the abdomen.

### Genus POLYCRYTUS Spinola.

Carina bordering the posterior cavity of the mouth neither highly developed nor meeting to form a tubular cavity and not meeting the occipital carina.

### THYMARIMORPHA, new genus.

Tupe.—Thymarimorpha platygastra, new species.

Recalls the genus *Thymaris* Foerster but is related to *Anisitsia* Viereck from which it may be known by the postfurcal nervellus which is not angulated, by the propodeum not being furrowed and by the almost equilateral areolet.

### THYMARIMORPHA PLATYGASTRA, new species.

Type-locality.—C. Olympo, Asuncion, Paraguay, 11–12–'04, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Male.—Length 8.5 mm.; black, shining, and sculptured; face and clypeus longitudinally striate, the latter subemarginate, mandibles yellow with brownish tips, scape and pedicel mostly yellow, flagel dark brown except the first joint which is yellowish at its base and partly pale brown, palpi vellowish white; fore legs vellow except the onychii and claws which are brownish and the empodii which are blackish, mid coxæ yellow, hind coxæ pale brownish stramineous, rest of legs missing, notauli represented by an area of transverse striæ on each side of the dorsulum, tegulæ vellow basally, apically almost colorless with a stramineous tinge, wings pale brown, almost colorless, except the tips which are conspicuously infumated, veins more or less dark brown; propodeum with poorly defined carinæ, the basal area almost crowded out by the areola which latter is rather coffin shaped, its posterior boundaries, however, becoming confused with the sculpture of the propodeum; abdomen brownish stramineous, the second, ultimate, and penultimate, dorsal segments more or less blackish.

### ZAGLYPTOMORPHA, new genus.

Type.—Zaglyptomorpha attenuata, new species. Related to Glypta Gravenhorst from which it differs chiefly in the elongate abdomen which has its first to fifth segments, inclusive, distinctly longer than wide at the apex and by the prominently angularly produced anterior, superior edge of the pronotum which is prolonged downward as a trenchant carina.

### ZAGLYPTOMORPHA ATTENUATA, new species.

Type-locality.—Villa Morra, Asuncion, Paraguay, October 1, November 9, 1905, December 19, 1904; also from Tembetary, Sapucay, Asuncion, Paraguay, September 12, 1904, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 10 mm.; brownish stramineous; head mostly black, face with a brownish mark on each side near the clypeus, lower end of the cheeks and the mouth parts stramineous, tips of the mandibles blackish, apical edge of the scape stramineous; upper and lower edge of the pronotum, propleuræ, tegulæ, intumescence beneath the fore wings, wing bases, disk of scutel and postscutel, fore and mid coxe, fore trochanters, and mid and hind, distal trochanters vellow, mid, proximal trochanters vellow except for a blackish mark at base above, fore and mid femora vellowish at base, elsewhere stramineous, rest of fore legs stramineous excepting the claws and empodii which are dark, mid tibiæ yellowish except for a brownish annulus at apex and near the base, mid tarsi blackish except at the joints and the basal third of the metatarsi which are pale, hind coxe luteous, with an elongate black mark beneath, hind proximal trochanter mostly black, partly vellowish, hind femora almost entirely blackish except for the upper face which is yellow, hind tibiæ luteous, blackish above and with a subbasal and apical blackish annulus, hind tarsi colored in much the same way as the mid tarsi; propodeum with a completely defined areola which is distinctly longer than its greatest width; abdomen mostly black and punctured, its venter pale, its dorsum with brown marks, its second, third, and fourth segments with their apical margins vellowish stramineous, sheaths of the ovipositor distinctly although not much longer than the abdomen.

# ZAMASTRUS, new genus.

Type.—Zamastrus photopsis, new species.

Agrees with the original description of *Mastrus* Foerster but is evidently a Mesostenine with a Hemiteline venation in which the second, lower side of the areolet is represented only by a shadowlike vein; only the basal carina is present on the propodeum, which latter

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has in addition two smooth, conical projections where its posterior face joins the superior face. In the Mesostenini its nearest relative appears to be *Christolia* Brullé. Spiracles of the first, abdominal segment nearer to each other than to the apex.

# ZAMASTRUS PHOTOPSIS, new species.

Type-locality.—Sapucay, Asuncion, Paraguay, January 12, 1905, J. D. Anisits.

Type.—Königliche Zoologische Museum, Berlin.

Female.—Length 9 mm.; reddish brown and granular; head mostly black, front with a broad whitish margin along the eye margin, scape, pedicel, and clypeus brownish stramineous; malar space, labrum, and mandibles mostly whitish, the latter blackish at the tips, palpi pale stramineous, fourth to eighth joints of the flagel whitish above, rest of the flagel black; upper edge of the pronotum with a whitish margin. tegulæ anteriorly and the upper edge of the mesopleuræ whitish, rest of tegulæ brownish, fore coxæ pale stramineous as are the fore trochanters, femora, and tibiæ except for the blackish cast on the upper surfaces of these parts which is so arranged as to make the tibiæ appear as though they had a pale stramineous band at their base. fore tarsi mostly pale to dark brown, mid legs colored in much the same way as the fore legs, hind coxæ, trochanters, and femora mostly almost concolorous with the thorax, hind tibiæ and tarsi colored in much the same way as the same parts in the mid legs; propodeal spines vellowish and directed backward and outward; abdomen brownish stamineous and more or less finely sculptured and sericeous, the apical angles of the postpetiole and second, dorsal abdominal segment yellowish, the latter stramineous, apical margin of the third, sixth, and seventh dorsal segments more or less yellowish, basal lateral angles of the second and third dorsal segments black or blackish, apical margin of the fifth and most of the sixth, dorsal segments blackish, apical, dorsal segment black with a yellowish apical edge, sheaths of the ovipositor approximately as long as the first abdominal segment.